

ENERGY AND ENVIRONMENT CABINET

Department for Environmental Protection

Division of Water

**(Amended After Comments)**

401 KAR 8:030. Water treatment plant and [~~plants,~~] water distribution system classification and  
staffing [~~systems; certification of operators~~].

RELATES TO: KRS 223.180, 223.190, 223.200, 223.210, 223.220, 224.10-110, EO 2009-538  
[2008-507, 2008-531] [~~Chapters 223, 224~~]

STATUTORY AUTHORITY: KRS 223.180-223.220 [~~223.160-223.220~~], 224.10-100, 224.10-  
110, EO 2009-538

NECESSITY, FUNCTION, AND CONFORMITY: KRS 223.180-223.220 authorizes the  
cabinet to classify water treatment plants and distribution systems based on size, type, and physical  
condition and according to the skill, knowledge, and experience needed by the plant operator.  
[~~KRS 223.160-223.220 establishes a board of certification and authorizes the cabinet to establish a~~  
~~program requiring certification of water system operators.~~] KRS 224.10-110 **requires** [~~directs~~] the  
cabinet to enforce administrative regulations [~~adopted by the secretary~~] for the regulation and  
control of the purification of water for public and semipublic use and for the certification of water  
plant operators. EO 2009-538, effective June 12, 2009, establishes [~~2008-507 and 2008-531,~~  
~~effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and~~  
~~establish~~] the new Energy and Environment Cabinet. This administrative regulation establishes  
standards for the staffing and classification of water treatment plants and water distribution

1 systems[; qualifications of applicants; examination procedures; duties of the Kentucky Board of  
2 Certification of Water Treatment Plant and Water Distribution System Operators; and provisions  
3 relating to the issuance and renewal of certificates; disciplinary actions; and other provisions  
4 necessary for the certification of operators. The Safe Drinking Water Act Amendments of 1996,  
5 enacted August 6, 1996 (PL 104-182), include a provision for the certification of operators of  
6 public water systems. The regulations to implement the federal law are required no later than thirty  
7 (30) months after enactment of the federal law. Therefore, there are no federal regulations and this  
8 administrative regulation is not more stringent than the federal law or regulation].

9 Section 1. General Provisions. (1)(a) A [Each] public water system shall be [ensure that each  
10 component of the system is] operated according to the provisions of KRS [Chapters] 223 and 224  
11 and 401 KAR Chapter 8 [the administrative regulations of this chapter].

12 (b) [Each public water system shall operate its water treatment plant and water distribution  
13 system under the supervision of a certified operator who is in direct responsible charge of the  
14 system.] A certified operator shall not be [operators are not] required for a semipublic water  
15 system [systems].

16 (c) Except as provided in subsection (2)(c)1.b, 2.b and 4.b of this section, a public water  
17 system shall be operated by a [All] certified operator, other than an operator-in-training,  
18 [operators] in direct responsible charge who holds [shall hold] a valid certificate in a class equal to  
19 or higher than that required for the system under [his] supervision. [A certified operator may be:  
20 an individual who has been assigned responsibility for the operational procedures performed at  
21 the plant, or may be a person who is supervising others in the performance of operational  
22 procedures at the plant.]

23 (2) Staffing requirements.

1 (a) Water distribution systems. ~~[Operational procedures performed within]~~ A water  
2 distribution system ~~[systems]~~ shall be operated ~~[conducted]~~ by or under the supervision of a  
3 distribution system operator certified in a class equal to or higher than the class of the distribution  
4 system.

5 (b) Combination water treatment plants and water distribution systems.

6 1. A combination water treatment plant or water distribution system shall be classified as  
7 ~~[Operational procedures at all]~~ Class IA-D, Class IB-D, or Class ~~[and]~~ IIB-D. ~~[water systems]~~

8 2. A system classified as a combination system in subparagraph 1. of this paragraph shall be  
9 operated ~~[conducted]~~ by or under the supervision of an ~~[a certified water system]~~ operator who  
10 holds a valid combination or separate water treatment and distribution system operator certificate  
11 of the appropriate class or higher and who shall be ~~[is]~~ in direct responsible charge of the system.

12 3. A certified operator of a Class IA-D combination system shall be at the water treatment plant  
13 if water is being treated, unless the operator is performing other system-related duties.

14 (c) Water treatment plants.

15 1. Class IIA.

16 a. Except as provided in subparagraph b. of this paragraph, if water is being treated,  
17 ~~[Operational procedures at]~~ a Class IIA water treatment plant shall be operated ~~[conducted]~~ by a  
18 certified water treatment plant operator who holds a valid certificate in a class equal to or higher  
19 than Class IIA who shall be ~~[is]~~ in direct responsible charge of the plant and shall be present at ~~[is~~  
20 ~~physically located on the premises of]~~ the water treatment plant ~~[during the daytime shift or is~~  
21 ~~otherwise performing system-related duties]~~.

22 b. A Class IIA water treatment plant that treats water during more than one (1) shift per day  
23 may employ a Class IA-D certified operator for one (1) shift per day, other than the shift worked

1 by the Class IIA operator in direct responsible charge, so long as the Class IIA operator in direct  
2 responsible charge shall be ~~[on call and shall be]~~ able to respond on site within thirty (30)  
3 minutes.

4 ~~[Operational procedures conducted during other shifts shall be conducted by or under the~~  
5 ~~supervision of a Class IIA, IIIA, or IVA certified water treatment plant operator.]~~

6 2. Class IIIA.

7 a. Except as provided in subparagraph b, of this paragraph, if water is being treated,  
8 ~~[Operational procedures at]~~ a Class IIIA water treatment plant shall be operated ~~[conducted]~~ by a  
9 certified water treatment plant operator who holds a valid certificate in a class equal to or higher  
10 than Class IIIA who shall be ~~[is]~~ in direct responsible charge of the plant and shall be present at ~~[is~~  
11 ~~physically located on the premises of]~~ the water treatment plant ~~[when water is being treated or is~~  
12 ~~otherwise performing system related duties].~~

13 b. A Class IIIA water treatment plant that treats water during more than one (1) shift per day  
14 may employ a Class IIA operator for one (1) shift per day, other than the shift worked by the Class  
15 IIIA operator in direct responsible charge, so long as the Class IIIA operator in direct responsible  
16 charge shall be ~~[on call and shall be]~~ able to respond on site within thirty (30) minutes.

17 3. Class IIIB. ~~[Operational procedures at]~~ A Class IIIB water treatment plant shall be  
18 operated ~~[conducted]~~ by or under the supervision of a certified water treatment plant operator who  
19 holds a valid certificate in a class equal to or higher than Class IIIB and who shall be ~~[is]~~ in direct  
20 responsible charge of the system.

21 4. Class IVA.

22 a. Except as provided in subparagraph b, of this paragraph, if water is being treated,  
23 ~~[Operational procedures at]~~ a Class IVA water treatment plant shall be operated ~~[conducted]~~ by a

certified water treatment plant operator who holds a valid Class IVA certificate who shall be ~~[is]~~ in direct responsible charge of the plant and who shall be present at ~~[is physically located on the premises of]~~ the water treatment plant ~~[when water is being treated or is otherwise performing system-related duties]~~.

b. A Class IVA water treatment plant ~~[plants]~~ that treats ~~[treat]~~ water during more than one (1) shift per day may employ ~~[use]~~ a Class IIIA operator for one (1) shift per day, other than the shift worked by the Class IVA operator in direct responsible charge, so long as ~~[the additional shifts, if]~~ the Class IVA operator in direct responsible charge shall be ~~[is]~~ ~~[on-call and shall be]~~ ~~[is]~~ able to respond on site within thirty (30) minutes.

5. Class IVB. ~~[Operational procedures at]~~ A Class IVB water treatment plant shall be operated ~~[conducted]~~ by or under the supervision of a certified water treatment plant operator who holds a valid certificate in a class equal to or higher than Class IVB who is in direct responsible charge of the system.

**6. A water treatment plant may propose an alternate staffing requirement to the staffing requirement established in this paragraph.**

**a. The proposal shall be submitted to the cabinet and shall thoroughly explain the alternate proposal.**

**b. The proposal shall demonstrate:**

**(i) A necessity for the water system to vary from the requirement in this paragraph;**  
**and**

**(ii) An equal level of protection of human health and the environment.**

1 c. The cabinet shall not approve an alternate proposal that does not propose that a  
2 duly certified operator in direct responsible charge operate a water treatment plan, in  
3 accordance with KRS 223.210.

4 (d) [(e)] Bottled Water Systems. A bottled water treatment plant shall be operated by or under  
5 the supervision of a certified water treatment plant operator who holds a valid bottled water  
6 certification and who shall be [is] in direct responsible charge of the system.

7 (e) [(d)] System-related duties shall be duties related to the operation and maintenance of the  
8 water treatment plant.

9 ~~[(3)]Certifiable personnel. Persons who are under the supervision of the operator in direct~~  
10 ~~responsible charge are encouraged to and may become certified by the cabinet if they meet the~~  
11 ~~requirements of Section 8 of this administrative regulation and pass the appropriate examination of~~  
12 ~~the requested class. This provision shall apply only to personnel who have hands-on drinking water~~  
13 ~~treatment or distribution system experience.~~

14 ~~(4) Production personnel. On-site laboratory or distribution personnel and others who have~~  
15 ~~significant routine input into the treatment or distribution of potable water may be certified if they~~  
16 ~~demonstrate to the satisfaction of the cabinet that they meet the education and experience~~  
17 ~~requirements and possess the technical and practical knowledge to perform the procedures~~  
18 ~~involved in the operation of a water treatment plant or water distribution system.~~

19 ~~(5)](3)(a)~~ A public water system may comply with ~~[fulfill]~~ the staffing requirements of this  
20 section by securing a contract operator or an operations firm.

21 (b) If a public water system secures a contract operator or operations firm to operate a  
22 treatment plant or distribution system, the public water system shall provide the following  
23 information to the cabinet:

1. ~~[(a)]~~ Name, mailing address, and telephone number of **the**:

a. ~~[1.]~~ **[The]** Certified operator or contract operations firm; and

b. ~~[2.]~~ Principal contact ~~[within the firm]~~ for certification activities, if different;

2. ~~[(b)]~~ Name, ~~[and]~~ certificate type, and certificate number for each certified operator;

3. ~~[(c)]~~ Facility name, public water supply identification number, and county location of each system for which the contract or operations firm operator is assuming responsibility;

4. ~~[(d)]~~ Effective date and expiration date of the contract; and

5. ~~[(e)]~~ Duties and responsibilities of ~~[to be performed by]~~ each party to the contract ~~[involved]~~.

~~[(6)]~~ (4) Certificate display. If a public water system office is available at the water treatment plant or within the distribution system, each operator's certificate shall be prominently displayed.

~~[(7)]~~ ~~Wallet card. certified operators shall carry the wallet card issued by the cabinet in accordance with Section 4(1) of this administrative regulation showing current certification status while on duty.~~

~~[(8)]~~ (5) Reporting requirements.

(a) A ~~[Each]~~ public water system shall notify the cabinet in writing within thirty (30) calendar days of a certified operator employment **change** **[changes]**.

(b) 1. A certified operator ~~[operators]~~ shall notify the cabinet within thirty (30) calendar days of a change in employment or mailing address ~~[changes]~~.

2. Employment change information shall include:

a. The name and identification number of the public water system; ~~[5]~~

b. The effective date of the change; ~~[5]~~ and

c. Whether the operator is assuming or relinquishing responsibility for the plant or system.

1       Section 2. ~~[Duties of the Board. In carrying out its responsibilities and with consideration given~~  
2 ~~to the minimum standards and guidelines of the ABC, the board may:~~

3       ~~(1) Examine the qualifications of applicants and recommend qualified applicants to the cabinet~~  
4 ~~for certification;~~

5       ~~(2) Review and approve substitutions for education and experience requirements;~~

6       ~~(3) Review and assist the cabinet in the preparation of examinations;~~

7       ~~(4) Review and provide comments to the cabinet on proposed drinking water operator~~  
8 ~~certification administrative regulations;~~

9       ~~(5) Review and provide comments to the cabinet on proposed training courses and seminars~~  
10 ~~designed to provide continuing education to certified operators;~~

11       ~~(6) Review evidence and advise the cabinet regarding disciplinary actions for certified~~  
12 ~~operators who fail to comply with the applicable laws and administrative regulations of the~~  
13 ~~Commonwealth;~~

14       ~~(7) Review the certification administrative regulations of states which are seeking reciprocity~~  
15 ~~with the Commonwealth; and~~

16       ~~(8) Review and provide comments to the cabinet on proposed fees for training and certification~~  
17 ~~of operators.~~

18       Section 3. ~~Application and Examinations for Certification. (1) Application. An individual~~  
19 ~~desiring to be certified shall file an application with the cabinet and pay the applicable fee specified~~  
20 ~~in 401 KAR 8:050, Section 3. Application shall be made on the form entitled "Drinking Water or~~  
21 ~~Wastewater Operator Certification Application" provided by the cabinet and incorporated by~~  
22 ~~reference in Section 9 of this administrative regulation. Application shall not be filed with the~~  
23 ~~cabinet until the individual has met the minimum qualifications required in this administrative~~



1 regulation.

2       ~~(2) Examinations. The board and cabinet shall be jointly responsible for preparation of the~~  
3 ~~examinations which shall be used in determining knowledge, ability and judgment of the~~  
4 ~~applicants. The cabinet shall administer written exams unless the cabinet and board grant a waiver~~  
5 ~~to allow an oral exam. Oral exams may be administered to applicants who meet the minimum~~  
6 ~~qualifications outlined in Section 8 of this administrative regulation. The cabinet shall grade the~~  
7 ~~examinations and notify the applicant of the outcome. Applicants shall achieve a score of at least~~  
8 ~~seventy (70) percent to pass the examination. Examinations shall not be returned to the applicant,~~  
9 ~~but results may be reviewed with a member of the board or cabinet upon written request by the~~  
10 ~~applicant.~~

11       ~~(3) Scheduling examinations. Examinations shall be conducted at least semiannually at places~~  
12 ~~and times set by the cabinet. The cabinet shall provide advance announcement of these~~  
13 ~~examinations.~~

14       ~~(4) Examination content. The cabinet shall prepare examinations to address the basic~~  
15 ~~differences in the duties and responsibilities of certified operators, treatment processes, drinking~~  
16 ~~water standards, surface and groundwater source characteristics and other pertinent matters.~~

17       ~~(5) Applicant's conduct. Applicants found cheating shall be subject to disciplinary action~~  
18 ~~including a final score of zero on the examination, denial of future applications for certification, or~~  
19 ~~the provisions of Section 5 of this administrative regulation.~~

20       ~~(6) Confidentiality of examinations. Examination questions shall be confidential. Any person~~  
21 ~~who copies questions, removes all or part of any examination, or reveals all or part of any~~  
22 ~~examination for unauthorized use shall be denied certification, be subjected to the sanctions~~  
23 ~~identified in Section 5 of this administrative regulation, or be liable for civil and criminal penalties~~

1 pursuant to KRS 223.991 or 224.99-010.

2 ~~(7) Qualified applicants, other than those specified in subsection (5) or (6) of this section, who~~  
3 ~~fail to pass an examination may register to take the examination on a regularly scheduled~~  
4 ~~examination date.~~

5 ~~Section 4. Issuance of Certificates. (1) Certification. Upon satisfactory fulfillment of the~~  
6 ~~requirements of this administrative regulation and upon recommendation of the board, the cabinet~~  
7 ~~shall issue a certificate and a wallet card to the applicant designating the classification of the water~~  
8 ~~treatment plant or water distribution system for which the operator has demonstrated competency.~~

9 ~~(2) Duration and renewal of certificates.~~

10 ~~(a) Certificates for all certified operator classes, except the limited classification as identified~~  
11 ~~in Section 6(5) of this administrative regulation, shall be issued with a common expiration date of~~  
12 ~~June 30 of even-numbered years, and shall remain valid until that date, unless suspended or~~  
13 ~~revoked for cause. Certificates issued between January 1 and June 30 of an even-numbered year~~  
14 ~~will be issued to include the next two (2) year renewal period.~~

15 ~~(b) Certificates shall expire on June 30 of even-numbered years if not renewed. Operators with~~  
16 ~~expired certificates shall not be in direct responsible charge of a public water system.~~

17 ~~(c) Renewals. Certificates shall be renewed without examination, if the certified operator has a~~  
18 ~~valid certificate; upon completion of the required, board approved continuing education hours~~  
19 ~~outlined in subsection (7) of this section and upon submittal of a complete renewal application and~~  
20 ~~applicable fees specified in 401 KAR 8:050, Section 3. Operators desiring renewal shall apply on~~  
21 ~~the form entitled "Application for Certificate Renewal" provided by the cabinet and incorporated~~  
22 ~~by reference in Section 9 of this administrative regulation by June 30 of even-numbered years.~~  
23 ~~Expired certificates shall continue in force pending administrative processing of a renewal, if the~~

1 ~~certified operator has a valid certificate and has complied with all the renewal requirements of this~~  
2 ~~subsection and subsection (7) of this section by June 30 of the renewal year. Certificates continued~~  
3 ~~under this paragraph remain fully effective and enforceable.~~

4 ~~(d) Limited certificates shall expire on June 30 of each year. The cabinet shall renew the~~  
5 ~~limited certificate upon receipt of the renewal application if the certified operator has complied~~  
6 ~~with all requirements for proper operation of the facility under his direct responsible charge and~~  
7 ~~has submitted a written application and applicable fees specified in 401 KAR 8:050, Section 3.~~

8 ~~(3) Certification for a higher classification. Certified operators who desire to become certified~~  
9 ~~in a higher classification shall satisfactorily complete the requirements of Sections 3 and 8 of this~~  
10 ~~administrative regulation for the higher classification.~~

11 ~~(4) Certificates shall be valid only while the holder uses reasonable care, judgment, and~~  
12 ~~application of his knowledge in the performance of his duties. Certificates shall not be issued or~~  
13 ~~valid if obtained through fraud, deceit or the submission of inaccurate data on qualifications.~~

14 ~~(5) Termination of a certificate.~~

15 ~~(a) If a certified operator fails to renew his certificate, the certificate shall terminate one (1)~~  
16 ~~year after its expiration date. Limited certificates shall terminate on December 31 of the renewal~~  
17 ~~year if they are not renewed. Once a certificate has terminated, an operator shall apply, pay~~  
18 ~~applicable fees and pass an examination in the classification for which he is qualified to be~~  
19 ~~certified.~~

20 ~~(b) Operators holding a certificate with an expiration date of June 30, 1994, on October 7, 1996~~  
21 ~~may renew the certificate by fulfilling the renewal requirements specified in subsections (2)(c) and~~  
22 ~~(7) of this section for each renewal period by June 30, 1997.~~

23 ~~(6) Reciprocity. Certificates may be issued in a comparable classification, without~~

~~examination, to a person who holds a valid certificate in a state, territory, or possession of the United States, or a country, if:~~

~~(a) The applicant filed a complete application as required in Section 3(1) of this administrative regulation;~~

~~(b) The certificate was earned by passing an examination in the reciprocal state;~~

~~(c) The requirements for certification under which the certificate was issued are no less stringent than the provisions of KRS Chapters 223 and 224 and this administrative regulation; and~~

~~(d) Reciprocal privileges are granted to certified operators of the commonwealth.~~

~~(7) Training requirements.~~

~~(a) Certified operators shall accumulate continuing education credits approved by the cabinet or board, prior to applying for certificate renewal. Class I and II certified operators shall complete twelve (12) hours of training for certificate renewal. Class III and IV certified operators shall complete twenty-four (24) hours of training for certificate renewal. The requisite training shall be completed for each renewal during the two (2) year period immediately prior to the certificate expiration date. Training includes correspondence courses, short courses, trade association meetings, and on-the-job training courses.~~

~~(b) Certified operators holding separate treatment and distribution certificates shall complete the training hours for recertification required for only the highest certificate in lieu of the continuing education requirements specified for both certificates in paragraph (a) of this subsection.~~

~~(c) Certified operators who teach board approved training courses shall receive, upon approval of the board, hour-for-hour credit for actual instruction time.~~

~~(d) The criteria for determining whether to approve training, other than the training provided~~

by the cabinet, are:

1. ~~The ability of the course to provide information that will enhance the proper operation and maintenance of water treatment and distribution systems; and~~

2. ~~The ability of the instructor to properly present the information.~~

3. ~~In making its determination regarding approval of training courses, the cabinet and board shall require that the following information be submitted for review: the course name; the date, location and a timed agenda for the course; the credit hours being requested; a summary of the course content of sufficient detail to determine relevance and quality of the course; and the name and credentials of each instructor for the course.~~

4. ~~The board or cabinet may attend and evaluate, or cause to be evaluated, all board approved courses.~~

(e) ~~All course administrators who provide board approved training shall maintain records on each board approved course conducted and shall submit the information in the records to the cabinet within thirty (30) days of the conclusion of the course. The information shall include:~~

1. ~~The course name;~~

2. ~~The course number assigned by the cabinet;~~

3. ~~The class date and location;~~

4. ~~The name, certificate type and number, and hours attended by each operator; and~~

5. ~~The course administrator's signature.~~

Section 5. Disciplinary Action. (1) ~~A certified operator shall be subject to a disciplinary action identified in this section if the cabinet, in consultation with the board according to this section, determines that the individual has:~~

(a) ~~Willfully or negligently violated or caused a violation of this administrative regulation;~~

~~(b) Submitted false or misleading information on any document provided to the cabinet, including applications for certification or renewal;~~

~~(c) Cheated on an examination, or violated confidentiality of examination questions;~~

~~(d) Used fraud or deception in the course of employment as an operator;~~

~~(e) Failed to use reasonable care or judgment in the course of employment as an operator, failed to apply knowledge or ability in the performance of duties, was incompetent in the performance of duties, or was unable to properly perform duties;~~

~~(f) Willfully or negligently caused or violated the requirements of KRS Chapters 223 or 224 or 401 KAR Chapter 8; or~~

~~(g) Willfully or negligently falsified or failed to maintain or submit, records required by 401 KAR Chapter 8.~~

~~(2) Sanctions. The disciplinary action shall be determined by the cabinet in accordance with the review procedures in subsection (3) of this section, and may take the form of the following sanctions according to subsection (4) of this section, depending on the severity, duration, and number of the violations. The sanctions may include:~~

~~(a) Probation for a specified period of time, not to exceed one (1) year;~~

~~(b) Suspension of the operator's certificate for a specified period of time, not to exceed one (1) year, during which the certificate shall be considered void;~~

~~(c) Temporary or permanent revocation of the operator's certification (temporary revocations shall not be less than one (1) year or more than four (4) years in duration); and~~

~~(d) Civil or criminal penalties against the operator.~~

~~(3) Initial review procedures. Written complaints received by the board or cabinet on a certified operator, unless duplicitous or frivolous, shall be reviewed at the next regularly scheduled~~

1 ~~board meeting. If the charges warrant further investigation, the certified operator may be advised to~~  
2 ~~appear before the board to discuss the charges levied. Upon completion of the review, the board~~  
3 ~~shall make a recommendation to the cabinet regarding the operator's certification status. The board~~  
4 ~~may recommend that no action be taken or that the cabinet impose a sanction identified in~~  
5 ~~subsection (2) of this section, or any other action.~~

6 ~~(4) Cabinet action. The cabinet shall review the evidence presented and the board's~~  
7 ~~recommendations. Upon completion of the review, the cabinet shall initiate the recommended~~  
8 ~~action or notify the board as to why an alternative action was taken. The certified operator and his~~  
9 ~~employer shall be advised by certified mail of the action, the reasons outlined for the action, and~~  
10 ~~the length of time for which the sanction shall apply. A certified operator whose certificate has~~  
11 ~~been suspended or revoked shall not perform direct responsible charge operator duties during the~~  
12 ~~period that the disciplinary action remains in effect. If a certification is permanently revoked, the~~  
13 ~~operator shall be ineligible for future certification as a water treatment plant or distribution system~~  
14 ~~operator. Experience gained during a suspension or temporary or permanent revocation shall not be~~  
15 ~~included toward meeting the requirements of Section 8 of this administrative regulation. An action~~  
16 ~~taken by the cabinet pursuant to this administrative regulation shall not preclude the cabinet from~~  
17 ~~pursuing additional civil or criminal action.~~

18 ~~(5) Sanction review and removal. During the operator's probation, suspension, or temporary~~  
19 ~~revocation, the board and cabinet shall monitor the operator's work activities. At the end of the~~  
20 ~~sanction period, the board will recommend to the cabinet whether the sanction should be lifted or~~  
21 ~~whether additional action is necessary against the certified operator.~~

22 ~~(6) Appeal procedures. An operator who considers himself aggrieved by the disciplinary action~~  
23 ~~may file a petition for hearing with the cabinet pursuant to KRS 224.10-420(2).~~

~~Section 6.] Classification of Water Treatment Plants and Water Distribution Systems. There~~  
~~[The classification system] shall be [structured with] four (4) classes of water treatment plants,~~  
~~Class I, II, III, or IV; [5] [which includes] two (2) subclasses of treatment types, A or B; [5] [and]~~  
~~four (4) classes of water distribution systems, Class I, II, III, or IV; [5] and one (1) bottled water~~  
~~class.~~

(1)(a) Class IV is the highest class, and subclass A is the highest subclass.

(b) Combined treatment and distribution classifications [also] exist for Class I and II systems:  
Class IA-D, Class IB-D, and Class IIB-D.

(2) The water treatment plant and water distribution system classifications correspond to [class  
structure relates to and corresponds with] the operator classifications established in 401 KAR  
11:040. [outlined in Section 7. Operators with separate treatment and distribution certifications  
may supervise a facility with a combined classification if the certifications are equal to or higher  
than the system classification.]

(3) A [(4)] Public water system [classifications] shall be classified according to the criteria in  
subsection (4) [established in accordance with the classes listed in subsections (2) and (3)] of this  
section.

(a)1. [However,] The cabinet may change a public water system classification if necessary  
because of:

a. Complexity of the system due to engineering design;

b. Source water quality; or

c. Operation conditions. [make changes in system classifications in accordance with needs  
created by particular complexities of a public water system by reason of special features of  
design, or by reason of a source of supply that has characteristics that may make operation more



~~difficult than normal, or a combination of these conditions.]~~

2. ~~[Due]~~ Notice of a change shall be given to the owner of the public water system.

(b) The cabinet shall reclassify a nontransient noncommunity water system that treats water primarily for its industrial process with limited employee ~~use~~ intervention ~~[use]~~ if the calculated portion of the water produced by the water treatment plant not used for the industrial process averages less than ten (10) percent of the average daily production averaged over the most recent twelve (12) months.

(4) (a)1. A water treatment plant or system ~~[(2) Water treatment plants or systems]~~ shall be classified ~~[as one (1) of four (4) classes,]~~ based on the cabinet-assigned design capacity for finished water production ~~[that]~~ the treatment plant is able to produce in twenty-four (24) continuous hours of production, taking ~~[all limiting factors]~~ into consideration all limiting factors ~~[,]~~ and the treatment process employed.

2. A water treatment plant classification shall be as established in Table 1 of this subsection.

(b)1. A water distribution system shall be classified according to population served, determined as established in 401 KAR 8:200, Section 3.

2. A water distribution system classification shall be as established in Table 1 of this subsection.

<u>TABLE 1</u>		
	<u>Water Treatment Plant (Assigned Design Capacity)</u>	<u>Water Distribution System (Population Served)</u>
<u>Class I</u>	<u>Less than 50,000 gallons per day</u>	<u>Less than 1,500</u>
<u>Class II</u>	<u>50,000 gallons or more per day but less than 500,000 gallons per day</u>	<u>Equal to or greater than 1,500 but less than 15,000</u>

<u>Class III</u>	<u>500,000 gallons or more per day but less than 3,000,000 gallons per day</u>	<u>Equal to or greater than 15,000 but less than 50,000</u>
<u>Class IV</u>	<u>3,000,000 gallons or more per day</u>	<u>Equal to or greater than 50,000</u>

~~[Public water systems with more than one (1) treatment plant shall have each treatment plant classified in accordance with this section, and each plant shall be operated in accordance with Section 1 of this administrative regulation.]~~

~~[(a) The treatment plant classifications and designated capacities shall be:~~

~~1. Class I: a [all] treatment plant that has [plants which have] an assigned design capacity of less than 50,000 gallons of water per day;~~

~~2. Class II: a [all] treatment plant that has [plants which have] an assigned design capacity of 50,000 or more gallons of water per day, but less than 500,000 gallons per day;~~

~~3. Class III: a [all] treatment plant that has [plants which have] an assigned design capacity of 500,000 or more gallons of water per day, but less than 3,000,000 gallons per day; and~~

~~4. Class IV: a [all] treatment plant that has [plants which have] an assigned design capacity of 3,000,000 or more gallons of water per day.~~

~~(b)] (c) Each class of water treatment plant shall be subdivided according to the type of treatment used by the plant. The subclasses shall be:~~

~~1. Subclass A: a water treatment plant that treats: [plants which use gravity filtration, except slow sand filtration as described in 401 KAR 8:150, as a part of their treatment scheme]~~

~~a. Surface water or groundwater under the direct influence of surface water; or~~

~~b. Groundwater not under the direct influence of surface water that uses **gravity filtration [a component of conventional filtration treatment]**; and~~

~~2. Subclass B: a water treatment plant that treats:~~

1        a. Groundwater not under the direct influence of surface water and uses a filtration process  
2        other than gravity filtration; or

3        b. Groundwater not under the direct influence of surface water that does not use  
4        filtration processes [does not employ any component of conventional filtration treatment]  
5        [plants which use treatment processes other than gravity filtration. This includes the use of slow  
6        sand filtration as described in 401 KAR 8:150 for Class I and II water treatment plants].

7        (d) A [(e)] combination treatment and distribution system shall be classified as  
8        [classifications:] Class IA-D, Class IB-D, or Class [and] IIB-D [systems shall be classified as  
9        combined treatment and distribution systems].

10       (e) Each treatment plant comprising a single public water system shall be classified in  
11       accordance with this section, and each plant shall be operated in accordance with Section 1 of this  
12       administrative regulation.

13       ~~[(3) Water treatment plant or system classifications:~~

14       ~~(a) Class I:~~

15       ~~1. A Class IA-D. Systems which have an assigned design capacity of less than 50,000~~  
16       ~~gallons of water per day using gravity filtration, except for slow sand filtration, as a part of their~~  
17       ~~treatment scheme and are responsible for the distribution of treated water.~~

18       ~~— 2. Class IB-D. Systems which have an assigned design capacity of less than 50,000 gallons of~~  
19       ~~water per day using slow sand filtration or treatment processes other than gravity filtration, and~~  
20       ~~are responsible for distribution of treated water.~~

21       ~~(b) Class II:~~

22       ~~1. Class II-A. Plants which have an assigned design capacity of 50,000 or more gallons of~~  
23       ~~water per day but less than 500,000 gallons per day using gravity filtration, except slow sand~~

1 ~~filtration, as a part of their treatment scheme.~~

2 ~~2. Class IIB-D. Systems which have an assigned design capacity of 50,000 or more gallons~~  
3 ~~of water per day but less than 500,000 gallons per day using slow sand filtration or treatment~~  
4 ~~processes other than gravity filtration, and are responsible for the distribution of treated water.~~

5 ~~(c) Class III:~~

6 ~~1. Class IIIA. Plants which have an assigned design capacity of 500,000 or more gallons of~~  
7 ~~water per day but less than 3,000,000 gallons of water per day using gravity filtration, except~~  
8 ~~slow sand filtration, as a part of their treatment scheme.~~

9 ~~2. Class IIIB. Plants which have an assigned design capacity of 500,000 or more gallons of~~  
10 ~~water per day but less than 3,000,000 gallons of water per day using treatment processes other~~  
11 ~~than gravity filtration.~~

12 ~~(d) Class IV:~~

13 ~~1. Class IVA . Plants which have an assigned design capacity of 3,000,000 or more gallons~~  
14 ~~of water per day using gravity filtration, except slow sand filtration, as a part of their treatment~~  
15 ~~scheme.~~

16 ~~2. Class IVB . Plants which have an assigned design capacity of 3,000,000 or more gallons~~  
17 ~~of water per day using treatment processes other than gravity filtration.~~

18 ~~Water distribution systems. Populations shall be determined as specified in 401 KAR 8:200.~~

19 ~~(a) Class ID. Distribution systems serving a population less than 1,500.~~

20 ~~(b) Class IID . Distribution systems serving a population equal to or greater than 1,500 and~~  
21 ~~less than 15,000.~~

22 ~~(c) Class IHD . Distribution systems serving a population equal to or greater than 15,000 and~~  
23 ~~less than 50,000.~~

1 ~~(d) Class IVD. Distribution systems serving a population equal to or greater than 50,000.]~~

2 (5) A bottled water treatment plant classification shall only apply to a bottled water system that  
3 bottles water for sale.

4 (6) Limited. A limited classification is available to a water treatment facility serving a school  
5 or a [facilities for schools and] semipublic water system [systems].

6 ~~[(6)Special. Special designations may be added to any certificate if necessary to show~~  
7 ~~competency of the operator for a parameter of treatment or operation not covered by the basic~~  
8 ~~requirements for standard classification set forth in this section.~~

9 ~~(7) Public water systems which were reclassified pursuant to this administrative regulation as~~  
10 ~~in effect on October 7, 1996 shall comply with the requirements of Section 1 of this administrative~~  
11 ~~regulation by October 7, 1997~~

12 ~~Section 7. Classification of Water Treatment Plant and Water Distribution System Operators.~~  
13 ~~Thirteen (13) subclasses of certified operators are established and designated as Class I through~~  
14 ~~Class IV for water treatment, Class I through Class IV for distribution, and limited. Each operator~~  
15 ~~classification, except for limited, relates directly to the corresponding classification of water~~  
16 ~~treatment plant or water distribution system outlined in Section 6 of this administrative regulation.~~

17 ~~Section 8. Operator Qualifications: Experience, Education and Equivalencies. (1)~~  
18 ~~Requirements. Applicants shall be examined by the cabinet regarding education, experience, and~~  
19 ~~knowledge, as related to the classification of water treatment plants or water distribution systems~~  
20 ~~for which the application applies. Applicants shall pass the required written examination unless~~  
21 ~~granted a waiver to take an oral examination in accordance with Section 3(2) of this administrative~~  
22 ~~regulation.~~

23 ~~(2) Classification of water treatment plant operators. Operators shall comply with the~~

~~experience and educational requirements of this subsection prior to applying for certification.~~

~~(a) Class IA-D:~~

~~1. Completion of high school or general education development (GED) efficiency; and~~

~~2. One (1) year of experience operating a Class IA-D or higher public water system.~~

~~(b) Class IB-D:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. One (1) year of experience operating a Class IB-D or higher public water system.~~

~~(c) Class IIA:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. Two (2) years of experience operating a public water treatment plant, with six (6) months of that experience in a Class IIA, IIIA or IVA treatment plant.~~

~~(d) Class IIB-D:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. Two (2) years of experience operating a public water system, with six (6) months of that experience in a Class IA-D, IIB-D, or higher treatment system.~~

~~(e) Class IIIA:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. Three (3) years of experience operating a public water treatment plant with one (1) year in a Class IIA, IIIA, or IVA water treatment plant.~~

~~(f) Class IIIB:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. Three (3) years of experience operating a public water treatment plant with one (1) year in a Class IIA, IIB-D, IIIA, IIIB, IVA, or IVB water treatment plant.~~

~~(g) Class IVA:~~

~~1. A baccalaureate degree from an accredited college or university; and~~

~~2. One (1) year of experience operating a Class IIIA or IVA water treatment plant.~~

~~(h) Class IVB:~~

~~1. A baccalaureate degree from an accredited college or university; and~~

~~2. One (1) year of experience operating a Class IIIA, IIIB, IVA, or IVB water treatment plant.~~

~~(i) Limited: An operator of a water treatment facility for a school or for a semipublic water supply shall be entitled to apply for a limited certificate of competency for his particular facility, if he has demonstrated to the cabinet that he has the knowledge and experience required to properly operate the particular water treatment facility for which he is responsible.~~

~~(3) Classification of water distribution system operators. Operators shall comply with the experience and educational requirements of this subsection prior to applying for certification.~~

~~(a) Class ID:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. One (1) year of experience operating a distribution system.~~

~~(b) Class IID:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. Two (2) years of experience operating a distribution system with six (6) months in a Class IID, IIID or IVD distribution system.~~

~~(c) Class IIID:~~

~~1. Completion of high school or GED efficiency; and~~

~~2. Three (3) years of experience operating a distribution system, with one (1) year of that experience in a Class IID, IIID or IVD distribution system.~~

~~(d) Class IVD:~~

~~1. A baccalaureate degree from an accredited college or university; and~~

~~2. One (1) year of experience operating a Class IID or IVD distribution system.~~

~~(4) Substitutions.~~

~~(a) If applicable, education may be substituted for a portion of the required experience, as specified below:~~

~~1. No substitution for Class I or IV.~~

~~2. Successful completion of one (1) year of college work may be considered as equivalent to one (1) year of experience, limited to one (1) year for Class II and two (2) years for Class III.~~

~~3. Education applied to the experience requirement shall not be applied to the educational requirement or used as continuing education hours toward certification renewal.~~

~~(b) If applicable, the cabinet may authorize experience to be substituted for education requirements as specified below:~~

~~1. One (1) year experience in active operation of a water system at a Class II level or above shall be considered equivalent to one (1) year of college. Four (4) years of experience may be substituted for the requirement of a college degree by a high school graduate or recipient of a GED.~~

~~2. One (1) year of board approved experience may be considered equivalent to one (1) year of school. Four (4) years of board approved experience may be considered equivalent to a high school diploma or a GED, subject to the approval of the board. Operators requesting this substitution shall submit a written request to the cabinet and may be requested to appear before the board.~~

~~3. Experience applied to education requirements shall not be applied to the experience requirement.~~

~~(c) Substitutions of related experience for treatment plant and distribution experience.~~



1       ~~1. Experience gained in distribution system operation may be credited as specified in~~  
2 ~~paragraph (a) of this subsection toward fulfillment of the treatment plant experience requirement as~~  
3 ~~follows: two (2) years of distribution experience may be considered equivalent to one (1) year of~~  
4 ~~treatment experience.~~

5       ~~2. Experience gained in drinking water treatment plant operation may be credited as specified~~  
6 ~~in paragraph (a) of this subsection toward fulfillment of the distribution system experience~~  
7 ~~requirements as follows: one (1) year of drinking water treatment experience shall be considered~~  
8 ~~equivalent to one (1) year of distribution experience.~~

9       ~~3. Partial credit, as determined by the board, may be given for operating experience in~~  
10 ~~maintenance, laboratories, other work of drinking water treatment or distribution systems and~~  
11 ~~allied trades.~~

12       ~~(d) Substitutions for formal education may be as follows: training earned at board approved~~  
13 ~~operator training schools, seminars, and technical courses may be substituted for high school and~~  
14 ~~college requirements upon approval of the board. One (1) year of college work shall equal thirty~~  
15 ~~(30) semester hours or forty five (45) quarter hours. Six (6) classroom hours of board approved~~  
16 ~~courses shall equal one (1) training credit, and forty five (45) training credits shall equal eighteen~~  
17 ~~(18) semester hours of college or one (1) year of high school. One (1) continuing education unit~~  
18 ~~(CEU) shall equal ten (10) classroom hours.~~

19       ~~Section 9. Documents Incorporated by Reference. The following documents are incorporated~~  
20 ~~by reference and are available for public inspection and copying, subject to the copyright laws,~~  
21 ~~between the hours of 8 a.m. and 4:30 p.m. Monday through Friday, at the Division of Water, 14~~  
22 ~~Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601:~~

23       ~~(1) "Drinking Water or Wastewater Operator Certification Application", "DEP 6047 (8/96)",~~

- 1 ~~available from the Kentucky Environmental and Public Protection Cabinet, Division of Water,~~
- 2 ~~Frankfort, Kentucky.~~
- 3     ~~(2) "Application for Certificate Renewal", "DEP 6007 (8/96)", available from the Kentucky~~
- 4 ~~Environmental and Public Protection Cabinet, Division of Water, Frankfort, Kentucky.]~~

401 KAR 8:030 “Water treatment plant and water distribution system classification and staffing”  
approved for promulgation:

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Date

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Leonard K. Peters, Secretary  
Energy and Environment Cabinet

## REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 8:030 AAC

Contact Person: Peter T. Goodmann, Assistant Director

**(1) Provide a brief summary of:**

- (a) What this administrative regulation does:** This administrative regulation establishes standards for the staffing and classification of water treatment plants and water distribution systems.
- (b) The necessity of this administrative regulation:** This administrative regulation is necessary to ensure that water treatment plants and water distribution systems are aware of the statutory requirement that an operator who has passed a certification examination by the cabinet operates the system or plant.
- (c) How this administrative regulation conforms to the content of the authorizing statutes:** KRS 224.10-110 directs the cabinet to enforce administrative regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use and for the certification of water plant operators. KRS 223.180-223.220 authorizes the cabinet to classify water treatment plants and distributions systems based on size, type, and physical condition and according to the skill, knowledge, and experience needed by the operator.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:** This administrative regulation informs water treatment plants and water distribution systems of the staffing requirements for their class of system or plant.

**(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:**

- (a) How the amendment will change this existing administrative regulation:** The requirements pertaining to the examination and certification of operators are moving to a new chapter, 401 KAR Chapter 11, which is regulated by the Division of Compliance Assistance. The proposed amendment adds a treatment plant classification specific to bottled water systems and further clarifies the sub-classifications of water treatment plants based on comments received during the public comment period.
- (b) The necessity of the amendment to this administrative regulation:** 401 KAR 8:030 was amended to remove the operator certification program requirements, which will be in 401 KAR Chapter 11, and to clarify water plant and distribution system staffing, clarify the sub-classifications of water treatment plants, and add a bottled water classification.
- (c) How the amendment conforms to the content of the authorizing statutes:** KRS 224.10-110 directs the cabinet to enforce administrative regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use and for the certification of water plant operators. KRS 223.180-223.220 authorizes the cabinet to classify water treatment plants and distributions systems based on size, type, and physical condition and according to the skill, knowledge, and experience needed by the operator. The amendment further clarifies the sub-classification of water treatment plants in response to comments received during the public comment period.
- (d) How the amendment will assist in the effective administration of the statutes:** The

amended regulation will be simpler and more effective because it will only address the classification, sub-classification, and staffing requirements for water distribution systems and water treatment plants. The details of the operator examination and certification process are in a separate chapter.

**(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation:** As of June 2009, there are 481 public water systems, fifty-two semi-public water systems, one non-public water system, and seven bottled water systems. There are six regional water systems with water treatment plants but no distribution system, 274 water systems that have both a treatment plant and a distribution system, and 201 water systems that only have a distribution system.

**(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:**

**(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment:** No action is necessary unless the water system is in the process of hiring new operating staff. The regulated entity must hire the operator required for their plant classification as established in this regulation.

**(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3):** As there are no fees in this administrative regulation, the clarifications and revisions will not create any cost for the regulated entities identified in question (3).

**(c) As a result of compliance, what benefits will accrue to the entities identified in question (3):** By allowing an operator certified one classification lower than that required of the plant to operate for one (1) shift other than the primary shift, a water system may be able to recruit qualified staff and have existing staff qualify for the required certification more quickly. This will result in a water system having the ability to stay in compliance with not only the staffing requirements of 401 KAR Chapter 8 but also the analytical compliance requirements.

**(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:**

**(a) Initially:** No additional cost is anticipated.

**(b) On a continuing basis:** No additional cost is anticipated.

**(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation?** Federal funds through the Public Water System Supervision (PWSS) grant and Drinking Water State Revolving Loan set-asides.

**(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment:** No increase in funding will be necessary to implement the proposed amendment.

**(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees:** No fees are established or increased in this amended

regulation.

- (9) TIERING: Is tiering applied? (Explain why or why not)** Tiering is applied in that water treatment plants and distribution systems are classified according to rated design capacity or population served. The lower the design capacity or population served, the lower the classification required. There are four classifications of water treatment plants, four classifications of distribution systems, and one bottled water classification. Within the four classifications of water plants there are two sub-classifications based upon the complexity of treatment. Water treatment and distribution processes can vary depending upon the size of the water system they serve or the type of treatment necessary to remove contaminants in the source water.

## **FISCAL NOTE ON STATE OR LOCAL GOVERNMENT**

**Regulation #:** 401 KAR 8:030 AAC

**Contact Person:** Peter T. Goodman, Assistant Director

- 1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)?**

Yes   X   No       

**If yes, complete questions 2-4.**

- 2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation?**

All municipalities, counties, water authorities, water commissions and privately-owned drinking water systems will be affected.

- 3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation.** Safe Drinking Water Act Title 42, Chapter 6A, Sub-chapter XII, Part B, Section 300g-8 (Operator Certification) and Part E, Section 300j-12 (DW Revolving Loan Fund); 40 C.F.R. 142.16 on Special Primacy requirements; KRS 224.10-110 and 223.180-220

- 4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.**

**(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year?** No additional revenue will be generated.

**(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years?** No additional revenue will be generated.

**(c) How much will it cost to administer this program for the first year?** No additional cost is anticipated.

**(d) How much will it cost to administer this program for subsequent years?** No additional cost is anticipated.

**Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.**

**Revenues (+/-):**

**Expenditures (+/-):**

**Other Explanation:**

## FEDERAL MANDATE ANALYSIS COMPARISON

Administrative Regulation#: 401 KAR 8:030 AAC

Contact Person: Peter T. Goodman, Assistant Director

**1. Federal statute or regulation constituting the federal mandate.**

Safe Drinking Water Act Title 42, Chapter 6A, Sub-chapter XII, Part B, Section 300g-8 (Operator Certification) and Part E, Section 300j-12 (DW Revolving Loan Fund); also 40 C.F.R. 142.16 on Special Primacy requirements.

**2. State compliance standards.**

KRS 224.10-110, 223.180-220

**3. Minimum or uniform standards contained in the federal mandate.**

US Code Title 42, Chapter 6A, Subchapter XII, Part B, subpart 300g-8, provides the Safe Drinking Water Act (SDWA) guidelines for establishing an operator certification program at the state level (section 1419a of the Act). Final guidelines and additions to those guidelines were published in the February 5, 1999 and April 18, 2001 Federal Registers. Minimum standards for certification of operators take into account existing State programs, complexity of the water system, size of the water system, and other factors that provide an effective program at a reasonable cost. The Final Guidelines in the two Federal Registers cover public health objectives, anti-backsliding, baseline standards, system/operator classification, operator qualifications, enforcement, certification renewal and the resources needed to implement the program.

**4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate?**

No

**5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. Not applicable.**